[Kibe-log]

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#11

The fusion of technology and finance learned when I was wearing a helmet

Dear Stakeholders, I am Kazunari Kibe, President and CEO of INFRONEER Holdings Inc. Thank you very much for reading the "Kibe-log" again.

I studied civil engineering at university, and after graduating I joined MAEDA CORPORATION. Before I became the President and CEO of INFRONEER, I was often asked, "Which financial institution did you work for before?"

Indeed, INFRONEER, dealing with infrastructure-related concessions, is a unique company in the general contracting industry. I must have been assumed to be from the financial industry because I used a lot of financial vocabulary when talking about the project.

For a while, to everyone I met, I was passionately talking about the importance of the secondary (secondary distribution) market for buying and selling structured projects. I don't think there was a person from a general contractor anywhere who talked about that at the time. Whenever people asked me "Which financial institution were you with?" I joked "With MAEDA Bank."

The time I worked on construction sites where I had to deal with unexpected events.

I worked on construction sites wearing a helmet for the first 10 years of my career with MAEDA CORPORATION. How did such a person like me come to talk about finance? It is because I began to study the infrastructure business and concessions as MAEDA CORPORATION proceeded along its "decontracting" path.

In the late 1990s, I learned that European construction majors were working on concessions for airports and highways, and I saw MAEDA CORPORATION's future in that business. Since then, I have taken

every opportunity to visit these companies and have studied not only their actual business, but also their legal systems and other structures. A quarter of a century later, INFRONEER was born and is finally taking the shape that I envisioned at the time.

However, looking back, I feel that the "root" that led me to where I am today existed when I was working at construction sites, wearing a helmet.

When I joined the company in 1986, I worked primarily on urban civil engineering sites, such as utility tunnels and sewer works in urban areas. These were small-scale construction sites with relatively short construction periods, rather than large-scale, long-term construction sites such as dams. I believe that this environment has made me the base of what I am today.

This is because urban civil engineering, such as sewer construction, deals with the unseen realm of the underground, and unexpected things happen daily.

For example, sometimes pipes are buried in different places from the drawings, or the drawings that the government has are wrong from the beginning. If something unexpected occurs during the actual digging, we must respond flexibly onsite each time.

In addition, every project site has a budget. The latest technology allows us to use better construction methods and select better machineries, but of course, it costs additional money. In public works projects, the budget for such projects comes from our tax money, so we must always consider the balance between cost and effectiveness when deciding on construction methods. This is the same story in the infrastructure business today.

Moreover, if an unexpected event occurs that may increase construction costs, the construction method must be revised, and cost increases need to be discussed with the client beforehand.

In the case of urban civil engineering, the client is either the national government, public administration, or organizations with a highly public nature such as railroads, electric power companies, and gas companies. Cost increases bounce back to taxpayers and users, so even when asking for a budget increase, the reason for the cost increase and what construction methods will be used to solve the problem must be able to support the accountability of the clients themselves. For this purpose, it is necessary to talk with them based on numbers and other evidence.

At that time, as an onsite employee, I was repeatedly making hypotheses and verifying what I should do to deal with the problems in front of me and to keep the construction period and cost within the budget. If I have acquired the ability to think deeply, it is because I was trained to do so during working on construction sites.

Infrastructure business integrating construction and finance.

As I wrote in the Vol. 4 Kibe-log "The secondary market of infrastructure will bring more investment" (https://www.infroneer.com/pdf/en/company/topblog/kibelog_en_vol4.pdf), infrastructure projects are a fusion of engineering and finance, and the construction engineering-based technology and financial knowledge and know-how are indispensable.

For example, in the case of renewable energy-related facilities such as a solar power plant, we will determine, based on our engineering capabilities, whether the project will contribute to "decarbonization" and whether it can generate stable returns over the long term. In doing so, in addition to knowledge about the equipment, we need to know the conditions of the location and the ground where the equipment will be installed to correctly calculate the possible risk.

INFRONEER also operates infrastructure such as the Aichi Toll Road and Osaka City Industrial Water Supply through concession projects in the form of special purpose companies (SPCs), where we serve as the representative company.

When participating in such concession projects, it is essential to have experience in road maintenance and management, such as paving and repair of road surfaces, or knowledge of water pipes and their deteriorated condition, as well as expertise in determining the timing of repairs, for risk assessment purposes.

The same is true for the "BT + Concession*" for the new Aichi Prefecture Gymnasium (Arena) that we are working on. For such a large-scale public facility, it is necessary to calculate not only the business income and expenditure for event operations during the concession period, but also detailed construction costs and repair costs during the concession period. If these costs are not reflected in the bid price, the project cannot be structured.

*BT + Concession

The concession method in which the operator designs and builds (B) the facility based on its own proposal, transfers (T) ownership to the prefecture upon completion, and then the prefecture sells the right to operate the facility to the operator for a certain period and entrusts the operation and maintenance of the facility to

the operator (concession). It is called "BT + Concession", an acronym for Build and Transfer plus Concession.

The elements listed above are related to engineering capabilities, but financial perspectives are of course also important to make infrastructure operations viable as a business.

To generate stable returns, private funds such as project finance must be introduced wisely and leveraged within the range of risk that can be taken. Since infrastructure operations are long-term, spanning 20 to 30 years, it is also necessary to manage debt by considering the duration and procurement costs.

In addition, since social infrastructure that generates stable earnings over the medium to long term is a financial product suitable for long-term investors such as pension funds, we must consider selling the equity portion of the SPC that is responsible for the operation to them at the appropriate time while optimizing the operation and maintenance. This is the story of the secondary market.

Thus, to develop an infrastructure business, it is neither possible to have engineering capabilities alone nor financial knowledge and know-how alone, it is necessary to have a good balance of both capabilities. Furthermore, the INFRONEER Group has technology and expertise not only in construction and paving, but also in industrial and construction machinery. That is why we believe that the infrastructure business is the right business to entrust the future of INFRONEER to.

Business opportunities exist where different industries and sectors overlap.

I have been studying the infrastructure business since the early 2000s, including research trips to Europe, but I only started to get seriously involved in finance in 2012, when I began discussing the establishment of a joint venture with the Australian investment bank Macquarie Group. To develop an infrastructure business centered on renewable energy projects, we decided to form a joint venture with Macquarie, which had an outstanding reputation for infrastructure investment.

The joint venture closed in 2023 as Macquarie scaled back its operations in Japan. However, during its nearly 10 years of activity, the joint venture launched many projects, including solar power plant projects in Ibaraki and Yamanashi prefectures. These projects have already been sold to other investors.

Companies like INFRONEER will structure the project and sell it as a financial instrument once it is stable enough to operate. This is meaningful not only in terms of decarbonization but also for the people who receive the returns from the project. It is what we call recycling of capital, and I learned that through the business with Macquarie.

Looking back, I learned a lot about business risk assessment and the concept of future value from my experience of having heated discussions with Macquarie's experts at that time. But I was able to understand these easily because I was conscious of managing construction schedules and budgets on site when I was young, and I am keenly aware that my experience working on construction sites has led me to the business I am in today.

As society has developed, the boundaries between traditional "industries" have become blurring. In the past, there was a clear division between construction and finance, with construction companies doing construction and banks and securities companies doing finance.

I feel that new business opportunities are now emerging where the respective industries overlap. The infrastructure business, which is on the borderline between construction and finance, is a typical example. Therefore, there are opportunities.

I tell my employees to learn about finance, but finance is only possible with knowledge on site. I believe this is the reason why general contractors must be able to engage in infrastructure business.